#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-004080 Address: 333 Burma Road **Date Inspected:** 30-Sep-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 1800 **Project Name:** SAS Superstructure **OSM Departure Time:** 600 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China

**CWI Name:** Sun Bo **CWI Present:** Yes No Yes **Inspected CWI report:** N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

### **Summary of Items Observed:**

#### Ultrasonic Verification

This QA inspector received notice of inspection from ZPMC for NDT verification. This QA inspector performed 10% review in bay 8 of weld number WSD1-SA301 A/B-7A/B for the tower section internal diaphragm ring were this QA inspector discovered a class A indication at the toe of the weld at face B. ZPMC re-evaluated this area and ground the toe area the area was re-tested and accepted by ZPMC. This QA inspector performed the QA review and found no rejectable indications at the time of the review. Tower shop bay 1, this QA inspector performed the QA review for 10% UT verification of skin plate A to stiffener plates of CJP welds. The weld numbers are SSD1-SA159 G/J-3,6,11,18 and 22, SSD1-SA15 A/F-27,28,29 and 30, SSD1-SA159-G/J-3,6 and 14, SSD1-SA159-F/J-3,6,14,18 and 21, SSD1-SA159-D/J-7,19,22,26 and 27 at the time of the QA review the welds appeared to be within conformance.

#### **OBG Bay 1 PMT**

This QA inspector observed ZPMC in bay 1 OBG for deck panel production monitoring test (PMT) for production date 10-1-08 on deck panel DP565-001. ZPMC welded the GMAW root pass which started at 1216hrs and the SAW process at 1238 after which ZPMC, ABF and this QA inspector performed a visual inspection of the weldment and found them to be within the criteria outlined for the PMT's. The PMT was welded on 2 separate plates with only 2 closed ribs due to ZPMC welding of DP565-001 for this test is a 3 rib panel. After the inspection was completed this QA inspector identified the area for the Macroetches location to be cut and ground. The Caltrans steel die stamp was placed at each Macroetches location to identify the side for the acid etches. ZPMC the proceeded to perform the UT testing of the depth of penetration and it was relayed and witnessed to be within the criteria outlined. This QA inspector along with ZPMC and ABF evaluated the Macroetches for PMT-1 and found them to be within the guidelines of the criteria for the PMT.

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

As noted above.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco, 1-381-694-2685, who represents the Office of Structural Materials for your project.

Inspected By:	Riley,Ken	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer